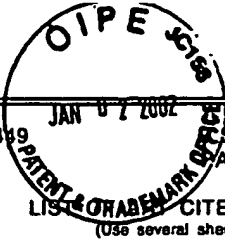
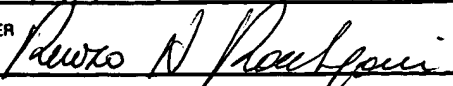
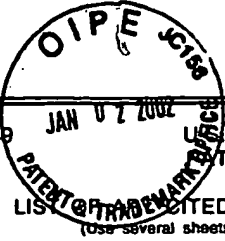
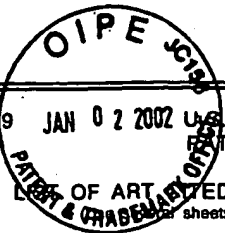




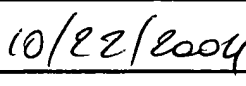


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LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT Kristy A. Campbell, et al.			
				FILING DATE August 29, 2001		GROUP 4818, 2525	
U.S. PATENT DOCUMENTS							
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)							
PAR	AR		D.B. Johnson, et al., "Lateral Diffusion in Ag-Be Thin-Film Couples", Journal of Applied Physics, Vol. 40, No. 1, January 1969, pp. 149-152.				
	AS						
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EXAMINER		DATE CONSIDERED			<div style="transform: rotate(90deg); transform-origin: center;"> RECEIVED FEB - 5 2002 TECHNOLOGY CENTER 2800 </div>		
<i>Shweta N. Rouffoni</i>		10/22/2004					
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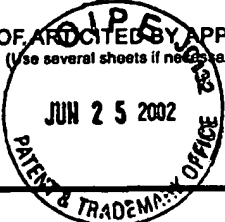
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FILING DATE August 29, 2001				GROUP 2816-72825		
U.S. PATENT DOCUMENTS						
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PNC	AA	09/797,635	Moore	—	—	03/01/2001
	AB	09/732,968	Gibson	—	—	12/08/2000
	AC	09/943,199	Campbell, et al.	—	—	08/29/2001
	AD	09/943,187	Campbell, et al.	—	—	08/29/2001
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	AF	5,238,882	Blalock et al.	—	—	
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PNC	AK	6,084,796	Kozicki et al.	—	—	
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PNC	AS	Hirose, et al., "Polarity-dependent memory switching and behavior of Ag dendrite in Ag-photodoped amorphous As ₂ S ₃ films", Journal of Applied Physics, Vol. 47, No. 6, June, 1976, pps. 2767-2772.				
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EXAMINER			DATE CONSIDERED			
			10/22/2004			
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Form PTO-1449				APPLICANT Kristy A. Campbell		RECEIVED	
LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)				FILING DATE August 29, 2001		GROUP 2825	
U.S. PATENT DOCUMENTS							
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<i>RAR</i>	AT		Mitkova, et al. "Dual Chemical Role of Ag as an Additive in Chalcogenide Glasses", Physical Review Letters, Vol. 83, No. 19, pps. 3848-3851.				
EXAMINER <i>Reuro N. Pachyari</i>		DATE CONSIDERED <i>10/22/2004</i>					
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

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LIST OF ARTS CITED BY APPLICANT <small>(Indicate the sheets if necessary)</small>				APPLICANT Kristy A. Campbell			
				FILING DATE August 29, 2001			
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			(pre-July 7, 2000) pp. 1-6.				
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			44 ADVANCES IN PHYSICS No. 6, 475-566 (Taylor & Francis Ltd. 1995)				
EXAMINER				DATE CONSIDERED			
							
<small>*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</small>							

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LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT: Kristy A. Campbell et al.			
				FILING DATE August 29, 2001		GROUP 2848 2829	



U.S. PATENT DOCUMENTS							
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RAH	AC	6,177,338 B1	01/23/01	Liaw et al.	438	629	
RAH	AD	6,350,679 B1	02/26/02	McDaniel et al.	438	634	
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EXAMINER <i>Rebecca N. Shultz</i>	DATE CONSIDERED <i>10/22/2004</i>
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Substitute for form 1449A/PTO			Complete if Known	
			Application Number	09/943,190
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT			Filing Date	August 29, 2001
			First Named Inventor	Kristy A. Campbell
			Art Unit	2816 2825
			Examiner Name	Not Yet Assigned
(use as many sheets as necessary)			Attorney Docket Number	M4065.0698/P698
Sheet	1	of	8	

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
PAE	AA	US 2002/0168820	11/14/2002	Kozicki et al.	
PAE	AB	6,469,364	10/22/2002	Kozicki	
PAE	AC	6,388,324	05/14/2002	Kozicki et al.	
PAE	AD	US 2002/0000666	01/03/2002	Kozicki et al.	
PAE	AE	5,500,532	03/19/1996	Kozicki et al.	
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	BA	WO 97/48032	12/18/1997	Kozicki et al.		
	BB	WO 99/28914	06/10/1999	Kozicki et al.		
	BC					
	BD					

Examiner Signature	<i>Thomas N. Packman</i>	Date Considered	10/22/2004
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¹ Applicant's unique citation designation number (optional). ² See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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				Filing Date	August 29, 2001
				First Named Inventor	Kristy A. Campbell
				Group Art Unit	2818 2425
				Examiner Name	Not Yet Assigned
Sheet	2	of	8	Attorney Docket Number	M4065.0698/P698

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²	
RAE	CA	Abdel-All, A.; Elshafie, A.; Elhawary, M.M., DC electric-field effect in bulk and thin-film Ge ₅ As ₃₈ Te ₅₇ chalcogenide glass, Vacuum 59 (2000) 845-853.		
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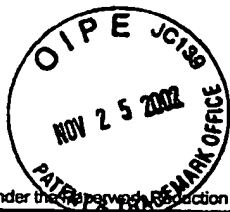
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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Application Number	09/943,190		
		Filing Date	August 29, 2001		
		First Named Inventor	Kristy A. Campbell		
		Group Art Unit	2848 7525		
		Examiner Name	Not Yet Assigned		
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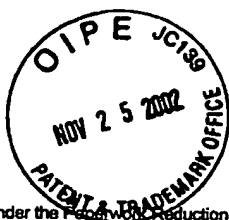


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				Group Art Unit	2818 2825
				Examiner Name	Not Yet Assigned
Sheet	4	of	8	Attorney Docket Number	M4065.0698/P698

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	09/943,190
				Filing Date	August 29, 2001
				First Named Inventor	Kristy A. Campbell
				Group Art Unit	2848 2825
				Examiner Name	Not Yet Assigned
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				Group Art Unit	2848 Z825
				Examiner Name	Not Yet Assigned
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				First Named Inventor	Kristy A. Campbell
				Group Art Unit	2818 2825
				Examiner Name	Not Yet Assigned
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Examiner Signature	<i>Rebecca Mancini</i>	Date Considered	10/22/2004
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Application Number	09/943,190
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First Named Inventor	Kristy A. Campbell
Group Art Unit	2825
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Complete if Known

Application Number	09/943,190
Filing Date	August 29, 2001
First Named Inventor	Kristy A. Campbell
Group Art Unit	2825
Examiner Name	R. Rocchegiani
Attorney Docket Number	M4065.0698/P698

Sheet	2	of	3
AT1	5,219,788	6/1993	Abernathy et al.
AU1	5,238,862	8/1993	Blalock et al.
AV1	5,272,359	12/21/1993	Nagasubramanian et al.
AW1	5,314,772	5/24/1994	Kozicki
AX1	5,315,131	5/1994	Kishimoto et al.
AY1	5,350,484	9/1994	Gardner et al.
AZ1	5,360,981	11/1994	Owen et al.
AA2	5,500,532	3/19/1996	Kozicki et al.
AB2	5,512,328	4/1996	Yoshimura et al.
AC2	5,512,773	4/1996	Wolf et al.
AD2	5,726,083	3/1998	Takaishi
AE2	5,751,012	5/12/1998	Wolstenholme et al.
AF2	5,761,115	6/1998	Kozicki et al.
AG2	5,789,277	8/1998	Zahorik et al.
AH2	5,841,150	11/1998	Gonzalez et al.
AI2	5,846,889	12/1998	Harbison et al.
AJ2	5,896,312	4/20/1999	Kozicki et al.
AK2	5,914,893	6/22/1999	Kozicki et al.
AL2	5,920,788	7/1999	Reinberg
AM2	5,998,066	12/1999	Block et al.
AN2	6,072,716	06/06/2000	Jacobson et al.
AO2	6,077,729	6/2000	Harshfield
AP2	6,084,796	7/4/2000	Kozicki et al.
AQ2	6,177,338	1/2001	Liaw et al.
AR2	6,117,720	9/2000	Harshfield
AS2	6,143,604	11/2000	Chiang et al.
AT2	6,236,059	5/2001	Wolsteinholme et al.
AU2	6,297,170	10/2001	Gabriel et al.
AV2	6,300,684	10/2001	Gonzalez et al.
AW2	6,316,784	11/2001	Zahorik et al.
AX2	6,329,606	12/2001	Freyman et al.
AY2	6,348,365	2/19/2002	Moore et al.
AZ2	6,350,679	2/2002	McDaniel et al.
AA3	6,376,284	4/2002	Gonzalez et al.
AB3	6,388,324	5/14/2002	Kozicki et al.
AC3	6,391,688	5/2002	Gonzalez et al.
AD3	6,414,376	7/2002	Thakur et al.
AE3	6,418,049	7/9/2002	Kozicki et al.
AF3	6,423,628	7/2002	Li et al.
AG3	6,469,364	10/2002	Kozicki
AH3	6,473,332	10/2002	Ignatiev et al.
AI3	6,487,106	11/26/2002	Kozicki
**AJ3	2004/0038480	02/2004	Moore et al.
**AK3	2004/0042259	03/2004	Campbell et al.
**AL3	2004/0053461	03/2004	Moore et al.
**AM3	4,115,872	09/1978	Bluhm
**AN3	4,177,475	12/1979	Holmberg
**AO3	4,203,123	05/1980	Shanks
**AP3	4,653,024	03/1987	Young et al.
**AQ3	5,363,329	11/1994	Troyan

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Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/943,190
		Filing Date	August 29, 2001
		First Named Inventor	Kristy A. Campbell
		Group Art Unit	2825
		Examiner Name	R. Rocchegiani
		Attorney Docket Number	M4065.0698/P698
Sheet	3	of	3

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²

Examiner Signature	<i>Rocco N. Rocchegiani</i>	Date Considered	10/22/2004
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¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
MI22-1668SERIAL NO.
09/943.190LIST OF ART CITED BY APPLICANT
(Use several sheets if necessary)

APPLICANT: Kristy A. Compbell et al.

FILING DATE
August 29, 2001GROUP
2818-2825

U.S. PATENT DOCUMENTS

*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
ms	AA	3,622,319	11/23/71	Sharp	96	27	
	AB	3,743,847	07/03/73	Boland	250	510	
	AC	4,269,935	05/26/81	Masters et al.	430	323	
	AD	4,312,938	01/26/82	Drexler et al.	430	496	
	AE	4,320,191	03/16/82	Yoshikawa et al.	430	296	
	AF	4,795,657	01/03/89	Formigoni et al.	427	96	
	AG	4,847,674	07/11/89	Silwa et al.	357	67	
	AH	5,177,567	01/05/93	Klersy et al.	257	4	
	AI	5,219,788	06/15/93	Abernathy et al.	437	187	
	AJ	5,726,083	03/10/98	Takaishi	438	210	
ms	AK	5,751,012	05/12/98	Wolstenholme et al.	257	5	

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AL							
	AM							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

ms	AN		Das et al., <i>Theory of the characteristic curves of the silver chalcogenide glass inorganic photoresists</i> , 54 APPL. PHYS. LETT., No. 18, pp. 1745-1747 (May 1989).
ms	AO		Helbert et al., <i>Intralevel hybrid resist process with submicron capability</i> , SPIE Vol. 333 / SUBMICRON LITHOGRAPHY pp. 24-29 (1982)
ms	AP		Hilt, DISSERTATION: <i>Materials Characterization of Silver Chalcogenide Programmable Metallization Cells</i> , Arizona State University, pp. title page-114 (UMI Company, May 1999).

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APPLICANT: Kristy A. Campbell et al.

FILING DATE
August 29, 2001GROUP
2618 2825

U.S. PATENT DOCUMENTS

Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
ms	AA	5,789,277	08/04/98	Zahorik et al.	438	95	
	AB	5,841,150	11/24/98	Gonzalez et al.	257	3	
	AC	5,920,788	07/06/99	Reinberg	438	466	
	AD	5,998,066	12/07/99	Block et al.	430	5	
	AE	6,077,729	06/20/00	Harshfield	438	128	
	AF	6,236,059 B1	05/22/01	Wolstenholme et al.	257	3	
	AG	6,297,170 B1	10/02/01	Gabriel et al.	438	738	
	AH	6,300,684 B1	10/09/01	Gonzalez et al.	257	774	
	AI	6,316,784 B1	11/13/01	Zahorik et al.	257	3	
	AJ	6,329,606 B1	12/11/01	Freyman et al.	174	260	
ms	AK	6,348,365	02/19/02	Moore et al.	438	130	

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							Yes	No
	AL							
	AM							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

ms	AN		Holmquist et al., <i>Reaction and Diffusion in Silver-Arsenic Chalcogenide Glass Systems</i> , 62 J. AMER. CERAMIC SOC., Nos. 3-4, pp. 183-186 (Mar.-Apr. 1979).	
ms	AO		Huggett et al., <i>Development of silver sensitized germanium selenide photoresist by reactive sputter etching in SF₆</i> , 42 APPL. PHYS. LETT., No. 7, pp. 592-594 (April 1983).	
ms	AP		Kawaguchi et al., <i>Mechanism of photosurface deposition</i> , 164-166 J. NON-CRYST. SOLIDS, pp. 1231-1234 (1993).	

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ms	AA	6,376,284 B1	04/23/02	Gonzalez et al.	438	129	
	AB	6,391,688 B1	05/21/02	Gonzalez et al.	438	128	
	AC	6,414,376 B1	07/02/02	Thakur et al.	257	640	
	AD	6,418,049 B1	07/09/02	Kozicki et al.	365	174	
ms	AE	6,423,628 B1	07/23/02	Li et al.	438	622	
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AL							
	AM							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

ms	AN	McHardy et al., <i>The dissolution of metals in amorphous chalcogenides and the effects of electron and ultraviolet radiation</i> , 20 J. PHYS. C: SOLID STATE PHYS., pp. 4055-4075 (1987).
ms	AO	Miyatani, <i>Electrical Properties of Ag₂Se</i> , 13 J. Phys. Soc. Japan, p. 317 (1958).
ms	AP	Mizusaki et al. <i>Kinetic Studies on the Selenization of Silver</i> , 47 BUL. CHEM. SOC. JAPAN., No. 11 pp. 2851-2855 (November 1974).

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10/31/04

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FILING DATE
August 29, 2001

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Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
my	AA	10/077,867		Campbell et al. (as filed)			02/20/2002
my	AB	10/232,757		Li, et al. (as filed)			08/29/2002
	AC						
	AD						
	AE						
	AF						
	AG						
	AH						
	AI						
	AJ						
	AK						

FOREIGN PATENT DOCUMENTS

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							Yes	No
	AL							
	AM							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

my	AN		Owens et al., <i>Metal-Chalcogenide Photoresists for High Resolution Lithography and Sub-Micron Structures</i> , NANOSTRUCTURE PHYSICS AND FABRICATION, pp. 447-451 (Academic Press, 1989).
my	AO		Safran et al., <i>TEM study of Ag₂Se developed by the reaction of polycrystalline silver films and selenium</i> , 317 THIN SOLID FILMS, pp. 72-76 (1998).
my	AP		Shimizu et al., <i>The Photo-Erasable Memory Switching Effect of Ag Photo-Doped Chalcogenide Glasses</i> , 46 BUL. CHEM. SOC. JAPAN, No. 12, pp. 3662-3665 (December 1973).

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							Yes	No
	AL							
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

ms	AN		Somogyi et al., <i>Temperature Dependence of the Carrier Mobility in Ag₂Se Layers Grown on NaCl and SiO₂ Substrates</i> , 74 ACTA PHYSICA HUNGARICA, No. 3, pp. 243-255 (1994).
ms	AO		Tai et al., <i>Multilevel Ge-Se film based resist systems</i> , SPIE Vol. 333 SUBMICRON LITHOGRAPHY, pp. 32-39 (March 1982).
ms	AP		Tai et al., <i>Submicron optical lithography using an inorganic resist/polymer bilevel scheme</i> , 17 J. Vac. Sci. Technol., No. 5, pp. 1169-1176 (Sept./Oct. 1980).

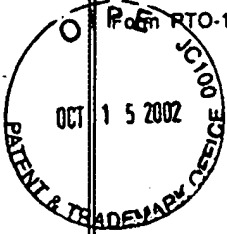
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		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. MI22-1668		SERIAL NO. 09/943,190			
		LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				APPLICANT: Kristy A. Campbell et al.			
		FILING DATE August 29, 2001				GROUP 2825			
U.S. PATENT DOCUMENTS									
*Examiner Initial		Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate		
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		Document Number	Date	Country	Class	Subclass	Translation		
							Yes No		
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OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)									
ms	AN		West, DISSERTATION: <i>Electrically Erasable Non-Volatile Memory Via electrochemical Deposition of</i>						
			<i>Multifractal Aggregates</i> , Arizona State University, pp. title page-168 (UMI Co., May 1998).						
ms	AO		West et al., <i>Equivalent Circuit Modeling of the Ag As_{0.14}S_{0.36}Ag_{0.40} Ag System Prepared by</i>						
			<i>Photodissolution of Ag</i> , 145 J. Electrochem. Soc., No. 9, pp. 2971-2974 (September 1998).						
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			pp. 161-163 (August 1977).						
EXAMINER <i>Mark S. Lee</i>				DATE CONSIDERED 10/31/07					
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APPLICANT: Kristy A. Campbell et al.

FILING DATE
August 29, 2001GROUP
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U.S. PATENT DOCUMENTS

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	AA						
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FOREIGN PATENT DOCUMENTS

		Document Number	Date	Country	Class	Subclass	Translation	
							Yes	No
	AL							
	AM							

OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, Etc.)

ms	AN		Yoshikawa et al., Dry development of Se-Ge Inorganic photoresist, 36 APPL. PHYS. LETT., No. 1,
			pp. 107-109 (January 1980).
	AO		
	AP		

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M. J. Sul

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